UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/614,352	07/07/2003	Peter M. Bonutti	782-A03-003-1	7916
7590 04/17/2007 PAUL D. BIANCO: FLEIT, KAIN, GIBBONS, GUTMAN, BONGINI, & BIANCO P.L. 21355 EAST DIXIE HIGHWAY SUITE 115 MIAMI, FL 33180			EXAMINER	
			_ YABUT, DIANE D	
			ART UNIT	PAPER NUMBER
			3734	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MOI	NTHS	04/17/2007	PAPER	

# Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

-;	Application No.	Applicant(s)			
•	10/614,352	BONUTTI, PETER M.			
Office Action Summary	Examiner	Art Unit			
	Diane Yabut	3734			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
<ul> <li>1) ⊠ Responsive to communication(s) filed on 26 Ms</li> <li>2a) ☐ This action is FINAL. 2b) ⊠ This</li> <li>3) ☐ Since this application is in condition for allowar closed in accordance with the practice under E</li> </ul>	action is non-final. nce except for formal matters, pro				
Disposition of Claims					
4) ☐ Claim(s) 1-3,8-21,24 and 25 is/are pending in t 4a) Of the above claim(s) is/are withdrav 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-3,8-21,24 and 25 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers  9) ☐ The specification is objected to by the Examine 10) ☐ The drawing(s) filed on 07 July 2003 is/are: a) ☐ Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	vn from consideration.  r election requirement.  r.  ⊠ accepted or b)  objected to be drawing(s) be held in abeyance. Selion is required if the drawing(s) is objected to be decompleted to the drawing(s) is objected to be decompleted to be decompleted to be decompleted to the drawing(s) is objected to be decompleted to the decomplete	e 37 CFR 1.85(a). jected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal F 6) Other:	ate			

Application/Control Number: 10/614,352 Page 2

Art Unit: 3734

## **DETAILED ACTION**

This action is in response to applicant's amendment received on 26 March 2007. The examiner withdraws the final rejection sent on 25 January 2007 after clarification of the Bonutti et al. (U.S. Pat. No. 6,368,343) reference used in the rejection of Claims 24 and 25 not qualifying as prior art since the present application claims priority to Bonutti et al.

# Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-3 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bartlett** (U.S. Patent No. **5,540,718**) in view of **Ogiu et al.** (U.S. Patent No. **4,235,238**).

Claims 1-3 and 8-11: Bartlett discloses a device for securing a suture having a cylindrical body portion defining a longitudinal central axis including a first end and a second end, wherein the second end is pointed and conical in shape and being capable of forming an opening in the body tissue in the patient's body when a force is applied against a trailing end of the cylindrical body in a direction extending along the longitudinal central axis of the cylindrical body, and the pointed end having a central axis which is coincident with the longitudinal central axis of the cylindrical body and a

Art Unit: 3734

plurality of openings each defining a passage through the body portion orthogonal, or transverse to the longitudinal central axis (the openings being parallel to one another) which allows for threading of a suture (Figure 1A and col. 5, lines 34-37). Bartlett discloses the claimed device except for one of the passages being formed partially in the body portion and partially in the pointed end portion.

Ogiu et al. teaches a tissue-suturing apparatus with a passage used for threading suture that is formed partially in the body portion 1 and partially in the pointed end portion 3 (Figure 51). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the Bartlett reference by having one of the passages being formed partially in the body portion and partially in the pointed end portion, since Applicant has not disclosed that having the passage being formed partially in the body portion and partially in the pointed end portion solves any stated problem or is for any particular purpose and it appears that the device of Bartlett would perform equally well with a passage formed partially in the body portion and partially at its pointed end portion.

3. Claims 12-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bartlett (U.S. Patent No. 5,540,718) and Ogiu et al. (U.S. Patent No. 4,235,238).

Claims 12-21: Bartlett and Ogiu et al. discloses the claimed device except for the cylindrical body being made of allogenic, autogenic, xenogenic, cortical bone, or a single piece of freeze dried bone, or made of a material selected from the group consisting of a metal, metal alloy, biodegradable material and bioerodible material,

Art Unit: 3734

wherein the suture is secured relative to a body tissue being soft tissue or bone. It would have been obvious to one of ordinary skill in the art to use any of the above materials in either soft tissue or bone with the combined device of Bartlett and Ogiu, since it was known in the art that these materials are used with suture devices with soft tissue or bone.

4. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bartlett** (U.S. Patent No. **5,540,718**) in view of **Ogiu et al.** (U.S. Patent No. **4,235,238**) and **Egan** (U.S. Patent No. **6,106,545**).

Claims 24 and 25: Bartlett and Ogiu disclose the claimed device (see paragraph 2 above), including a suture **64** connected to a device under tension and extending through the first and second passages, which is understood as the first and second passages not being separate passages, in order to be properly, fixedly threaded to the suture anchor (Bartlett: Figure 8, col. 6, lines 47-55), except for a retainer connected to the suture for maintaining the tension in the suture and made of a material that becomes flowable when ultrasonic vibratory energy is applied.

Egan teaches a retainer **24** connected to a suture **22** for maintaining the tension in the suture and made of a material that becomes flowable when ultrasonic vibratory energy is applied so that no knot is required to fix the suture in place (col. 3, lines 5-30). It would have been obvious to one of ordinary skill to provide a retainer that becomes flowable when ultrasonic vibratory energy is applied, as taught by Egan, to Bartlett and Ogiu et al. since it was known in the art that retainers maintain tension in sutures and

Art Unit: 3734

that retainers made of flowable material are beneficial in avoiding the challenging step of knotting the suture in place.

### Response to Arguments

- 5. Applicant's arguments filed 26 March 2007 have been fully considered but they are not persuasive.
- 6. Applicant argues that Ogiu does not disclose a device for securing a suture relative to a body tissue, but is in fact a device for inserting the device securing a suture relative to a body tissue, namely the stop. The examiner maintains that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim.
- 7. The applicant also argues that the stop of Ogiu is disclosed as having a single passage. The examiner asserts that one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. The examiner maintains that Ogiu is meant to be combined with Bartlett who discloses a plurality of openings (on either side of the suture anchor 20) each defining a passage through the body portion orthogonal, or transverse to the longitudinal central axis.
- 8. In response to applicant's argument that there is no suggestion to combine the references of Bartlett and Ogiu, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the

Page 6

claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. Since both references relate to suture anchors and the applicant has not disclosed that having the passage being formed partially in the body portion and partially in the pointed end portion, as taught by Ogiu, solves any stated problem or is for any particular purpose, it would appear that the device of Bartlett would perform equally well with a passage formed partially in the body portion and partially at its pointed end portion.

9. Applicant's arguments with respect to Claims 24-25 have been considered but are most in view of the new ground(s) of rejection.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diane Yabut whose telephone number is (571) 272-6831. The examiner can normally be reached on M-F: 9AM-4PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hayes can be reached on (571) 272-4959. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/614,352 Page 7

Art Unit: 3734

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DY

MICHAEL J. HAYES SUPERVISORY PATENT EXAMINER

M/ Haye